## **Appendix B (Cont.) High Technology Crime Costs** in California

## **Sources and Assumptions**

Overall

Costs are for 1998 unless noted

California Share of US Population: 12.3% CA Dept. of Finance, California Statistical Abstract, Jan. 1999 California Sales Tax Rate: 7.25% (not including local sales taxes), CA Board of Equalization

0.25% Assumption Local Sales Tax Rate: 10.00% Assumption Profit to Revenue Percentage

California Corporate Income Tax Rate: 8.84% CA Franchise Tax Board

California Personal Income Tax Rate: 4.00% Assumption California Share of World GDP: 0.3% Assumption California Corporate Profit/Rev Rate: 8% Assumption

White-collar

\$500 million: 1998 E-Commerce estimate, \$50B, and @1% fraud rate = \$500M

\$40 million: CSI / FBI Report, 1999, for selected firms

Rev./Empl: \$112,000 Prof Business Services, Accounting US Industry & Trade Outlook '98

\$33,300 Estimate based on rev / empl level Ave. Wage:

CA / US %: 19% based on population

**Computers and Networks** 

\$2,000 million: Angelica (1998), Spam: Cisneros, 1999; Virus attacks: Reuters, June 18, 1999, a likely level

\$400 million: Senate Hearings, Security in Cyberspace, 1996, an older number

\$121 million: CSI / FBI Report, 1999, for selected firms

Rev./Empl: \$397,000 Assume to be the same as Computers & Office EquipUS Industry & Trade Outlook '98

CA / US %: 25% California / US percentage, below

Ave. Wage: \$59,775 Computer Programming Svcs Cyberstates, v 3.0

Money Laundering

World: \$500 billion/yr, California share estimated as proportion of world GDP (0.3%).

Some California jobs and wages may be lost due to money laundering, but these are not accounted for in this analysis.

\$112,000 Prof Business Services, Accounting Rev./Empl: US Industry & Trade Outlook '98

Ave. Wage: \$33,300 Estimate based on rev / empl level

Telecommunications/Cable TV Table V-2 (Cont.): High Technology Crime Costs in California

Wireline: \$1 billion nationwide: CA Telco

Wireless: \$300 million nationwide, based on Bell Atlantic, 1997

Cable / Satellite: \$740 million in California each year, C&R Research (1999)

Rev./Empl: \$224,000 Telecommunications Services, 1996 US Industry & Trade Outlook '98

Ave. Wage: \$49,033 Communications Services, 1997 Cyberstates, v 3.0

## Appendix B (Cont.) High Technology Crime Costs in California

## **Sources and Assumptions (Cont.)**

**Software and Content Piracy** 

World: \$11 billion; U.S. \$2.9 billion; music/games estimate \$200 million in US, based on Gallagher, 1998.

Rev./Empl: \$380,000 Software US Industry & Trade Outlook '98

**US Employment, Software** 

CA Employment, Software 136,993

CA / US %: 25% California / US percentage, below

Ave. Wage \$66,536 Software & Comp Related-Svcs, 1997 Cyberstates, v 3.0

**Motion Picture Production** 

World: \$2 billion, MPAA, 1999

Rev./Empl: \$200,000 Assume this level for Motion Picture FUS Industry & Trade Outlook '98

Ave. Wage \$33,300 estimate based on Rev./Empl. level

CA/World 75% estimate since most motion picture services are in California

Theft and Resale of Computers / Components / Chips

\$4.247 billion in US: Source: Rand Report

California Share Calculation: Rev./Empl: Ave. Wage US Empl CA Empl Rev./Empl (\$) US Rev. (\$B) CA Rev. (\$B)

Computers \$397,000 \$70,419 Comp & Ofc. Equip. 371.585 94.953 397.000 148 38 Components \$203,000 \$60,000 Electronic Comp. 371,903 78,330 203,000 75 16 <u>94</u> <u>25</u> \$340,000 \$59,993 Semiconductor Mfg 276,131 73.163 340.000 Chips \$313,333 Ave Rev/Empl Cyberstates, v 3.0 **Total Revenue** 317 78 \$64,012 Estimate based on rev / empl level Ave. Wage CA / US %: 25%

Rev/Empl estimates from US Industry & Trade Outlook '98

Remarking Hardware Included in Rand Study

Rev./Empl: \$250,000 Assume to be the ave. of Electronic Components and Semiconductor Mfg., US Industry & Trade Outlook '98

Ave. Wage \$64,012 Estimate based on rev / empl level

**Counterfeiting Software** 

Rev./Empl: \$380,000 Software US Industry & Trade Outlook '98

Ave. Wage \$66,536 Software & Comp Related- Svcs, 1997Cyberstates, v 3.0

**Trade Secrets Theft** 

\$250 million: ASIS Intellectual Property Loss Survey

Rev./Empl: \$380,000 Assume to be same as Software US Industry & Trade Outlook '98

Ave. Wage \$66,536 Software & Comp Related- Svcs, 1997Cyberstates, v 3.0

CA / US %: 25% California / US percentage, above